IN THE CLAIMS:

Please amend the claims as follows:

1. (Cancelled)

2. (Currently amended) The solid state imaging apparatus of claim 31 ~~1~~, wherein ~~each said read-out line is connected to a transfer transistor connected to ones of the photoelectric conversion sections which~~ one of two switching elements which are coupled to the first storage node and one of two switching elements which are coupled to the second storage node are included in the same column.

3. (Currently amended) The solid state imaging apparatus of claim 31 ~~1~~, wherein ~~each said read-out line is connected to a transfer transistor connected to ones of the photoelectric conversion sections which~~ one of two switching elements which are coupled to the first storage node and one of two switching elements which are coupled to the second storage node are included in two adjacent columns~~, respectively~~.

4. (Currently amended) The solid state imaging apparatus of claim ~~1~~ 35, wherein each said ~~floating diffusion section~~ storage node and each said ~~pixel amplifier~~ output transistor are shared by ~~a row which is read out by a transfer transistor~~ the two switching elements ~~connected to one of the read-out line~~ which are coupled to the first read line and the second read line respectively ~~and another row which is adjacent to the read-out row~~.

5. (Currently amended) The solid state imaging apparatus of claim ~~1~~, 35, further comprising:

a signal line for outputting a signal from said ~~pixel amplifier~~ output transistor to the outside; and

a select transistor which is provided between the ~~pixel amplifier~~ output transistor and the signal line ~~to selectively conduct between the pixel amplifier transistor and the signal line~~.

6. (Currently amended) The solid state imaging apparatus of claim ~~1~~ 34, wherein ~~each said floating diffusion section~~ the first storage node and ~~each said pixel amplifier~~ the output transistor are shared by photoelectric ~~conversion sections~~ elements which are adjacent to each other in the row direction or in the column direction.

7. (Currently amended) The solid state imaging apparatus of claim 31 ~~1~~, ~~wherein in each said floating diffusion section,~~ further comprising:

a reset ~~section~~ element for resetting charge stored in ~~the floating diffusion section~~ the first storage node.

8. (Currently amended) The solid state imaging apparatus of claim 31 ~~1~~, wherein the photoelectric ~~conversion sections~~ elements are arranged so as to be spaced apart from one another by a certain distance in the row direction or in the column direction.

9. (Currently amended) The solid state imaging apparatus of claim 33 ~~1~~, further comprising:

a signal processing circuit for processing an output signal from said ~~pixel amplifier~~ output transistor.

10. (Currently amended) The solid state imaging apparatus of claim 31 ~~1~~, wherein:

the ~~photoelectric conversion cells~~ plurality of photoelectric elements arranged in an array of at least two rows and two columns define a unit of a photoelectric section; and

a plurality of the photoelectric ~~conversion cells~~ sections are separated from one another by a power supply line which also functions as a light-shielding film.

11. (Cancelled)

12. (Currently amended) A solid state imaging apparatus comprising:

a plurality of photoelectric ~~conversion cells~~ elements ~~each including a plurality of photoelectric sections~~ arranged in an array of at least two rows;

~~a plurality of floating diffusion sections each being connected, via each of a plurality of transfer transistors, to each of ones of the photoelectric conversion sections which are included in adjacent rows, respectively, and which are included in the same column in each said photoelectric conversion cell, and each being shared by said ones of the photoelectric conversion sections;~~

a plurality of switching elements, each of which is connected to one of said plurality of photoelectric elements, each of said switching elements operative for transferring charges from one of said photoelectric elements to one of a plurality of storage nodes;

~~a plurality of read-out lines each being connected to one of the transfer transistors and independently reading out charge from each of said ones of the photoelectric conversion sections to each said floating diffusion section shared by said ones of the photoelectric conversion sections; and~~

~~a plurality of pixel amplifier transistors each detecting and outputting the potential of the floating diffusion section~~

a plurality of read lines including a first read line coupled to a first switching element which is coupled to a storage node, and a second read line coupled to a second switching element which is coupled to the storage node.

13. (Currently amended) The solid state imaging apparatus of claim 12, further comprising:

a reset transistor for resetting charge stored in each said ~~floating diffusion section~~ storage node and an output transistor for detecting and outputting a voltage potential converted from said the storage node;

wherein ~~the~~ a drain of the reset transistor is connected to ~~the~~ a drain of the ~~pixel amplifier~~ output transistor so that ~~a~~ the drain is shared by the reset transistor and the ~~pixel amplifier~~ output transistor.

14. (Currently amended) The solid state imaging apparatus of claim 12, wherein ~~each said floating diffusion section~~ the storage node is arranged between ~~ones of the photoelectric conversion sections which~~ the two photoelectric elements which are adjacent to each other in the row direction ~~in each said photoelectric conversion cell~~.

15. (Currently amended) The solid slate imaging apparatus of claim ~~12~~ 13, wherein ~~each~~ said ~~transfer~~ switching transistor is made of an MIS transistor, and

~~wherein~~ a gate of the MIS transistor is arranged in the row direction.

16. (Currently amended) The solid state imaging apparatus of claim ~~12~~ 13, wherein ~~each~~ said ~~pixel amplifier~~ output transistor is arranged between rows which include some of the photoelectric ~~conversion sections and are~~ elements adjacent to each other ~~in each said photoelectric conversion cell~~.

17. (Currently amended) The solid state imaging apparatus of claim ~~12~~ 13, wherein ~~each~~ said ~~pixel amplifier~~ output transistor and ~~each~~ said ~~floating diffusion section~~ storage node are arranged between ~~adjacent ones of the read out lines~~ the first read line and the second read line.

18. (Currently amended) The solid state imaging apparatus of claim 12, wherein ~~each said pixel amplifier transistor is arranged between ones of the photoelectric cells~~ the plurality of photoelectric elements arranged in an array of at least two column which define a photoelectric section; and the output transistor is arranged between the two photoelectric sections which are adjacent to each other in the column direction.

19. (Currently amended) The solid state imaging apparatus of claim ~~18~~ 15,

wherein ~~each said transfer transistor is made of an MIS transistor, and wherein~~ each said ~~pixel amplifier~~ output transistor is arranged between ~~respective gates of the MIS transistor and another MIS transistor~~ the gate of a first MIS transistor and the gate of a second MIS transistor.

20. (Currently amended) The solid state imaging apparatus of claim 13 wherein each said reset transistor is arranged between ~~rows which include some of the photoelectric conversion sections and are adjacent to each other in each said photoelectric conversion cell~~ the first read line and the second read line.

21. (Currently amended) The solid state imaging apparatus of claim ~~13~~ 18, wherein ~~each said pixel amplifier~~ the output transistor and the ~~floating diffusion section~~ storage node are arranged between ~~adjacent ones of the read out lines~~ the two photoelectric sections which are adjacent to each other.

22. (Currently amended) The solid state imaging apparatus of claim ~~13~~ 18, wherein ~~each~~ said reset transistor is ~~connected to a line~~ arranged between ~~ones of the photoelectric cells~~ the two photoelectric sections, which are adjacent to each other in the row direction.

23. (Currently amended) The solid state imaging apparatus of claim ~~13~~ 18, wherein ~~each~~ said reset transistor is arranged between ~~ones of the photoelectric conversion cells~~ the two photoelectric sections, which are adjacent to each other in the column direction.

24. (Currently amended) The solid state imaging apparatus of claim ~~23~~ 15, wherein ~~each said transfer transistor is made of an MIS transistor, and wherein each~~ said reset transistor is arranged between ~~respective~~ the gate of ~~the~~ a first MIS transistor and ~~another~~ the gate of a second MIS transistor.

25. (Currently amended) The solid state imaging apparatus of claim ~~12~~ 18, wherein ~~each~~ said ~~floating diffusion section~~ storage node is arranged between ~~ones of the photoelectric conversion cells~~ the two photoelectric sections which are adjacent to each other in the column direction.

26. (Currently amended) The solid state imaging apparatus of claim 12, wherein the photoelectric ~~conversion sections~~ elements are arranged so as to be spaced apart from one another by a certain distance in at least one of the row direction and the column direction.

27. (Currently amended) The solid state imaging apparatus of claim 13, wherein ~~the line connecting respective drains of~~ a line of the drain shared by the reset transistor and the ~~pixel amplifier~~ output transistor also functions as a light-shielding film.

28. (Currently amended) The solid state imaging apparatus of claim 12, further comprising a signal processing circuit for processing an output signal ~~output~~ from ~~each~~ said ~~pixel amplifier~~ output transistor.

29. (Currently amended) A camera comprising a solid state imaging apparatus, the apparatus including:

~~a plurality of photoelectric conversion cells each including a plurality of photoelectric sections arranged in an array of at least two rows and two columns;~~

~~a plurality of floating diffusion sections each being connected to each of ones of the photoelectric sections which are included in the same row of each said photoelectric conversion cell via each of a plurality of transfer transistors, and being shared by said ones of the photoelectric sections which are included in the same row;~~

~~a plurality of read-out lines each being selectively connected to at least two of the transfer transistors; and~~

~~a plurality of pixel amplifier transistors each detecting and outputting the potential of each said the floating diffusion section,~~

~~wherein respective charges of the photoelectric conversion sections each being connected to one of the read-out lines and being read out by the transfer transistors are read out by different floating, diffusion sections~~

a plurality of photoelectric elements arranged in an array of at least two rows and two columns;

a plurality of switching elements, each of which is connected to one of said plurality of photoelectric elements, each of said switching elements operative for transferring charges from one of said photosensitive devices to one of a plurality of storage nodes;

a plurality of read lines including a first read line coupled to one of two switching elements which are coupled to a first storage node, and a second read line coupled to one of two switching elements which are coupled to a second storage node; and

said first read line also coupled to one of said two switching elements coupled to said second storage node, said second read line also coupled to one of said two switching elements coupled to said first storage node.

30. (Currently amended) A camera comprising a solid state imaging apparatus, the apparatus including:

~~a plurality of photoelectric conversion cells each including a plurality of photoelectric sections arranged in an array of at least two rows;~~

~~a plurality of floating diffusion sections, each being connected, via each of a plurality of transfer transistors, to each of ones of the photoelectric conversion sections which are included in adjacent rows, respectively, and which are included in the same column in each said photoelectric conversion cell, and each being shared by said ones of the photoelectric conversion sections;~~

~~a plurality of read-out lines each being connected to one of the transfer transistors and independently reading out charge from each of said ones of the photoelectric conversion sections to each said floating diffusion section shared by said ones of the photoelectric conversion sections; and~~

~~a plurality of pixel amplifier transistors each detecting and outputting the potential of the floating diffusion section~~

a plurality of photoelectric elements arranged in array of at least two rows and columns;

a plurality of switching elements, each of which is connected to one of said plurality of photoelectric elements, each of said switching elements operative for transferring charges from one of said photoelectric elements to one of a plurality of storage nodes;

a plurality of read lines including a first read line coupled to a first switching element which are coupled to a storage node, and a second read line coupled to a second switching element which is coupled to the storage node.

31. (New) A solid state imaging apparatus comprising:

a plurality of photoelectric elements arranged in an array of at least two rows and two columns;

a plurality of switching elements, each of which is connected to one of said plurality of photoelectric elements, each of said switching elements operative for transferring charges from one of said photoelectric elements to one of a plurality of storage nodes;

a plurality of read lines including a first read line coupled to one of two switching elements which are coupled to a first storage node, and a second read line coupled to one of two switching elements which are coupled to a second storage node; and

said first read line also coupled to one of said two switching elements coupled to said second storage node, said second read line also coupled to one of said two switching elements coupled to said first storage node.

32. (New) The solid state imaging apparatus of claim 31, wherein upon activation of said first read line both of said switching elements coupled to said first read line are activated, wherein one of said switching elements coupled to said first read line transfers charges to the first storage node, and the other said switching element coupled to the first read line transfers charges to the second storage node.

33. (New) The solid state imaging apparatus of claim 32, wherein upon activation of said second read line both of said switching elements coupled to said second read line are activated, wherein one of said switching elements coupled to said second read line transfers charges to the first storage node, and the other said switching element coupled to the second read line transfers charges to the second storage node.

34. (New) The solid state imaging apparatus of claim 3, wherein the plurality of photoelectric elements are photo diodes.

35. (New) The solid state imaging apparatus of claim 31, further comprising:

an output transistor which is coupled to the first storage node; and

the output transistor comprises of a source follower transistor which detects and outputs a voltage potential converted from said the first storage node.

36. (New) The solid state imaging apparatus of claim 31, wherein the plurality of read lines are connected to a vertical scanning circuit.